

A NEW SPECIES OF *SPINALANX* ROLSTON AND RIDER FROM SOUTH AMERICA (HETEROPTERA: PENTATOMIDAE)

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Abstract.—A new species of the South American genus *Spinalanx* is described from southern Brazil. The primary differentiating characters are found in the genitalic structures. The new species is named in honor of the distinguished hemipterist, L. H. Rolston.

Key words: Insecta, Pentatomidae, taxonomy, genitalia.

Among the genera of Western Hemisphere Pentatomini which lack a median spine or tubercle at the base of the abdomen (section 1), six have the surfaces of the femora armed or tuberculate. One of these, the genus *Spinalanx* Rolston and Rider, was erected to hold two South American species: *S. monstrabilis* Rolston and Rider, the type-species, from Peru and Colombia, and *S. corusca* Rolston and Rider, known from a single Bolivian female (Rolston & Rider 1988). In this genus the femoral surfaces have scattered, seta-bearing tubercles. Rolston and Rider (1988) differentiate *Spinalanx* from *Agroecus* Dallas using two key characters: the absence of impunctate bands on the hemelytral corium, and the presence of small tubercles on the basal plates of the female terminalia.

In my collection are five specimens representing an undescribed species from southern Brazil which is assignable to this genus. It agrees in all essential characters found in *Spinalanx* with the exception of the tubercles on the female basal plates. However, other characters align this species with *Spinalanx* rather than *Agroecus*. The low, seta-bearing, femoral tubercles are scattered, rather than in parallel rows, as in *Agroecus*. And, although the female basal plates lack tubercles, neither are they strongly convex, the condition typical of *Agroecus* (Rider and Rolston, 1987).

These unusual specimens were collected by me in southern Brazil in early 1980. Because of their similarity to certain species, which at the time were considered to be members of the genus *Euschistus* Dallas, I sent these to the authority on the latter genus, L. H. Rolston of Louisiana State University. Professor Rolston returned these specimens to me bearing a determination label, "*Agroecus* complex, n. gen. n. sp. LHR 80."

Presumably Rolston had forgotten about these specimens at the time that he and our colleague David A. Rider described the genus *Spinalanx*, or perhaps because of the lack of tubercles on the female plates, his notes did not reflect the true relationship of the species. In fact it is only recently upon concerted study of the specimens that I realized that they belonged to their genus. I now take the opportunity of the occasion of this issue dedicated to my long time friend, Larry Rolston, to describe this species in his honor.

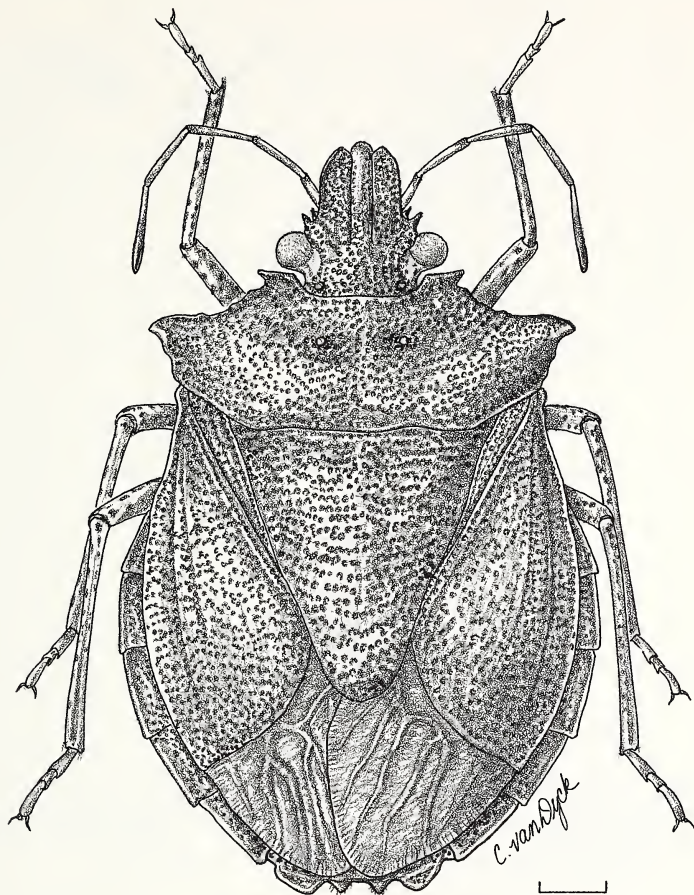


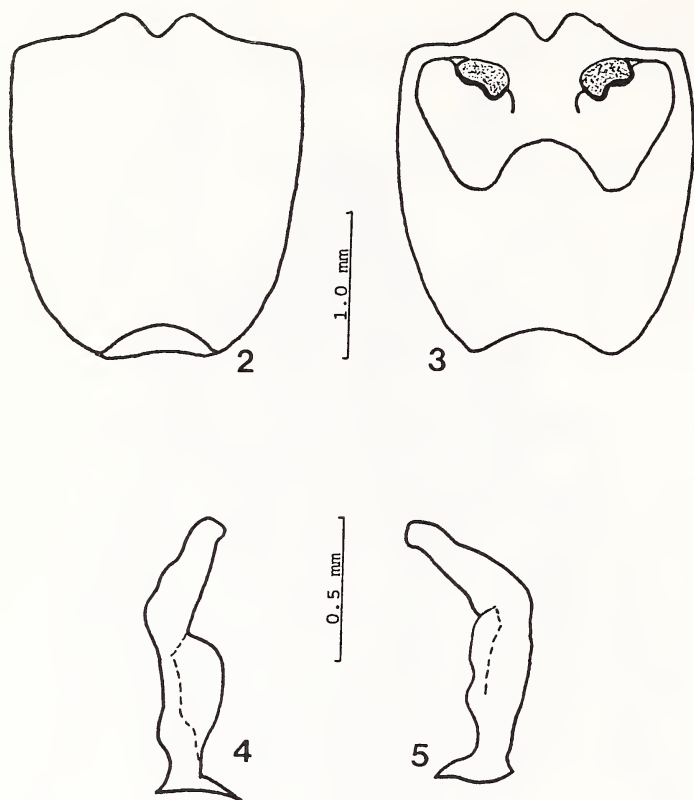
Fig. 1. Dorsal habitus of *Spinalanx rolstoni*, new species (bar = 1.0 mm).

Spinalanx rolstoni, new species
(Figs. 1-7)

Description. Dorsum dark brown; closely, darkly punctate; interstitial surfaces rugulose, strongly so near anterolateral pronotal margins. Venter tan with dense dark punctation; margins narrowly yellowish-tan on connexivum and basal reflexion of exocorium; broadly yellowish-tan at and behind humeral angles. Length 10.5 mm, width 6 mm.

Head. Tylus separated from apices of juga by a deeply notched incision. Lateral margins of juga sinuate; anteapical angles projecting acutely. Ocelli separated from eyes by about two and a half times their width. Each antennal segment I to V slightly longer than preceding segment; segment V about one-third longer than I. Rostrum attaining base of abdomen in repose.

Thorax. Anterior angle of humeri produced bluntly, similar to the humeri of *S.*

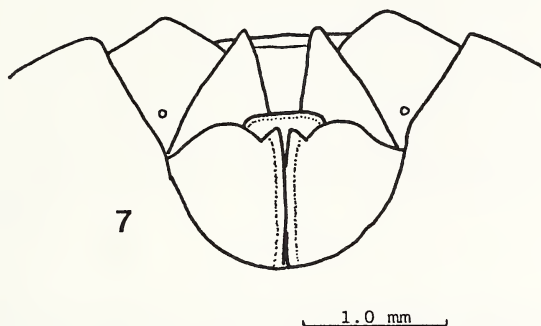
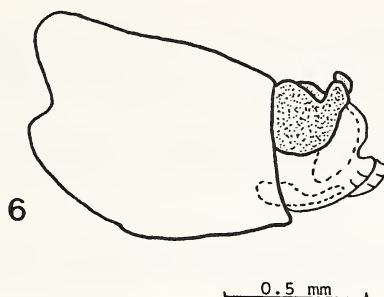


Figs. 2-5. Male genitalia of *Spinalanx rolstoni*: 2. pygophore, ventral view; 3. pygophore, dorsal view. 4. right paramere, ental view; 5. right paramere, ectal view.

corusca. Anterolateral margins carinately rugulose, the apices of rugae bearing short stiff setae. Anterior angle projecting as a short, stout, subterete spine. Dorsal surface of pronotum bearing a pair of small, dull yellow tubercles, one at inner angle of each cicatrice. Basal angles of scutellum each with shallow black pit; surface irregularly rugulose; apex darkened. Lateral margin of corium evenly arcuate; posterior margin strongly curved; yellow impunctate spot on disc of corium at terminus of exocorial suture. Membrane shortened, subtriangular in outline, not quite extending to abdominal apex. Femora with many low, dark, seta-bearing tubercles; these scattered, not in rows. Tibia prismatic with planar surface sulcate, at least proximally. Evaporatorium reduced to about one-fifth the surface of the metapleuron. Orifice with minute angulate auricle.

Abdomen. Venter evenly convex. Connexiva broadly exposed and bearing fringe of minute setae. Each sternite with pair of close set trichobothria on each side; the mesial member of each pair situated on imaginary line joining each spiracle.

Genitalia. Male. Pygophore bisinuately emarginate in ventral and dorsal view (Figs. 2, 3). Lumen of pygophore bearing pair of thickened cusps, one on each side



Figs. 6, 7. Genital structures of *Spinalanx rolstoni*: 6. Male aedeagus, lateral view. 7. Female valvulae, ventral view.

just ental to posteroventral margin (Fig. 3). Head of each paramere subacuminate, irregularly terete; shaft with thin alate flange (Figs. 4, 5). Thecal appendages thickened, sclerotized (Fig. 6). Female. Basal plates without tubercles; posterior margins sinuously arcuate in ventral view until abrupt angulation at mesial occlusion. Infra-margin of mesial edge impressed. Ninth paratergites triangular in outline. Eighth paratergites with spiracle present (Fig. 7).

Types. Holotype: Male, labeled (a) BRAZIL, Sta. Catarina, 15 mi W. Ponte Serrada. 1 MAR 1980, D. B. Thomas Coll. Deposited in American Museum Natural History, New York. Paratypes: 3 females same data. 1 male, labeled (a) BRAZIL, Paraná, 5 mi S. Guaraníaçu, 26 FEB 1980, D. B. Thomas Collector. Deposited American Museum Natural History (1 female), collection of author (1 male, 2 females).

ACKNOWLEDGMENTS

The relationship of these specimens to the genus *Agroecus* was determined by Professor L. H. Rolston. I am deeply indebted to Larry Rolston for years of encouragement, inspiration, and general good will. The habitus drawing of *S. rolstoni* was rendered by Chris Mari Van Dyck.

LITERATURE CITED

- Rider, D. A. and L. H. Rolston. 1987. Review of the genus *Agroecus* Dallas, with the description of a new species (Hemiptera: Pentatomidae). J. New York Entomol. Soc. 95:428–439.
- Rolston, L. H. and D. A. Rider. 1988. *Spinalanx*, a new genus and two new species of Pentatomini from South America (Hemiptera: Pentatomidae). J. N.Y. Entomol. Soc. 96:299–303.

Received 12 September 1996; accepted 25 September 1996.